



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Ranney Well Field Ground Water Plume (Anderson, IN)

Federal Programs Section – Site Investigation Program

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Background:

- In 2011, low levels of trichloroethylene (TCE) and other volatile organic compounds (VOCs) were detected in the City of Anderson's drinking water supplied by the Ranney Well Field.
- The Ranney Well Field consists of eight municipal ground water wells and supplies water to the Wheeler Water Treatment Plant. A population of over 32,000 is served by the Ranney Well Field.
- The City of Anderson's drinking water has been tested and has not exceeded the drinking water Maximum Contaminant Level (MCL) for VOCs. The MCL is a safe drinking water limit established by the United States Environmental Protection Agency (U.S. EPA) under the Safe Drinking Water Act. Information on the Safe Drinking Water Act may be obtained by contacting IDEM Project Manager Linda McClure at the email address provided under the Additional Information section, below, or on U.S. EPA's website at: www.epa.gov/safewater/sdwa/pdfs/fs_30ann_sdwa_web.pdf.
- Working under a cooperative agreement with the U.S. EPA, the Indiana Department of Environmental Management (IDEM) has decided to investigate the ground water contamination discovered in Anderson. This investigation will help IDEM to determine future actions needed to mitigate possible impacts from the contamination. The City of Anderson's Water Department is also assisting IDEM with this investigation.

Description:

- In the summer of 2014, IDEM's Site Investigation Program will be conducting a soil and ground water investigation in Anderson, Indiana.
- The objective of this investigation is to identify the potential sources of the Ranney Well Field ground water contamination.
- IDEM staff will be using a direct push sampling device to collect discreet subsurface soil and ground water samples. Ground water samples will also be taken from the Ranney Well Field municipal wells.
- IDEM staff may request access to private property in various locations to collect ground water and soil samples from businesses or residences to aid in this investigation. There is no charge associated with these samples, and property owners will be provided with the sample results collected from their property.

Environmental Impacts:

- Trichloroethylene (TCE) is a nonflammable, colorless liquid with a sweet odor. It is used mainly as a solvent to remove grease from metal parts. TCE is also a breakdown product of tetrachloroethylene (also known as tetrachloroethene, perchloroethylene, perc, perclene, perclor, and PCE), which is used in dry cleaning and industrial degreasing activities. TCE does not occur naturally in the environment.
- The U. S. Department of Health and Human Services has determined that TCE is "reasonably anticipated to be a human carcinogen." Studies have shown that drinking large amounts of TCE may cause nausea, liver damage, unconsciousness, impaired heart function, or death. Drinking small amounts of TCE for long periods of time may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear.
- People can be exposed to TCE from ingesting contaminated water used for drinking, cooking, and bathing (showering). A contaminated water supply can also impact indoor air quality in the home as TCE gases can be released from water during bathing, cooking, and laundry activities.
- Along with this fact sheet, IDEM is distributing the *ToxFAQs™ for Trichloroethylene* fact sheet from the Agency for Toxic Substances and Disease Registry that describes TCE and its effects in more detail. A copy of *ToxFAQs™ for Trichloroethylene* may be obtained by contacting IDEM Project Manager Linda McClure at the e-mail address provided under the Additional Information section, below, or on ATSDR's website at www.atsdr.cdc.gov/toxprofiles/tp.asp?id=173&tid=30.

IDEM's Role:

- IDEM is responsible for protecting human health and the environment while providing for safe industrial, agricultural, commercial, and governmental operations vital to a prosperous economy.
- IDEM's Site Investigation Program works to assess potential environmental hazards and prioritize contaminated sites for further needed actions. Once the sample results have been evaluated, IDEM Site Investigation Program staff and management will make a decision regarding future actions.
- IDEM staff will be available to answer questions and address concerns of residents and businesses.

Citizen's Role:

- Anderson businesses and residents can assist the State of Indiana, where requested, by allowing IDEM to take ground water and/or soil samples from their place of business or residence. These samples may require the use of a direct push sampling device. The direct push sampler is a tracked vehicle approximately the size of a small car. IDEM will take the necessary precautions to avoid damaging property or landscaping. If monitoring wells are present on your property, ground water from these wells will be obtained utilizing a rotary low flow pump.
- Access to private property will allow IDEM to sample the ground water and subsurface soil at various locations in the Anderson area to better identify the extent of contamination. Left unaddressed, the ground water contamination may become more widespread and pose a more significant threat in the future.

Additional Information:

- For questions and concerns regarding IDEM's environmental investigation in the Anderson area, please contact Linda McClure, IDEM Project Manager, at (317) 232-3220; toll free at (800) 451-6027, ext. 2-3220; or by e-mail at lmccclure@idem.IN.gov.
- For health-related questions, contact:
 - The Agency for Toxic Substances and Disease Registry (ATSDR) at (312) 886-1462.
 - The Marion County Health Department at (317) 221-2266.
- For media inquiries, contact Barry Sneed, IDEM Public Information Officer, at (317) 232-8596; toll free at (800) 451-6027, ext. 2-8596; or by e-mail at bsneed@idem.IN.gov.
- For more information about IDEM's Site Investigation Program, please visit IDEM's website at www.idem.IN.gov/4143.htm.